s18quiz: EXP LOG (Practice v115)
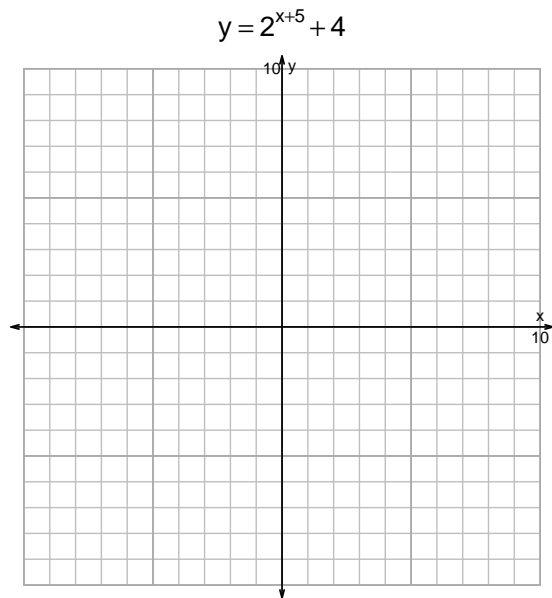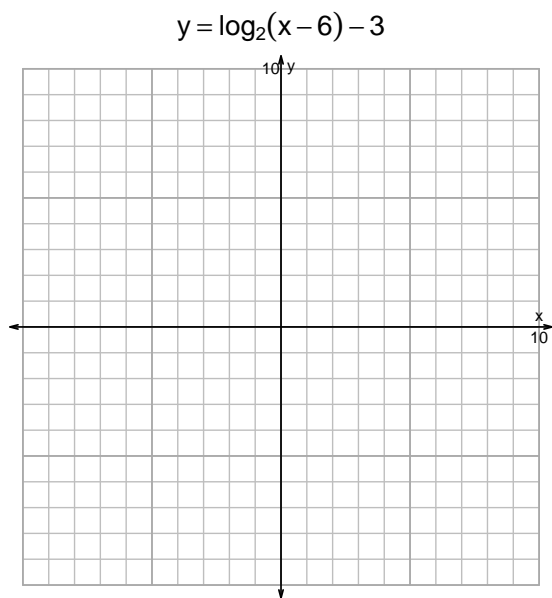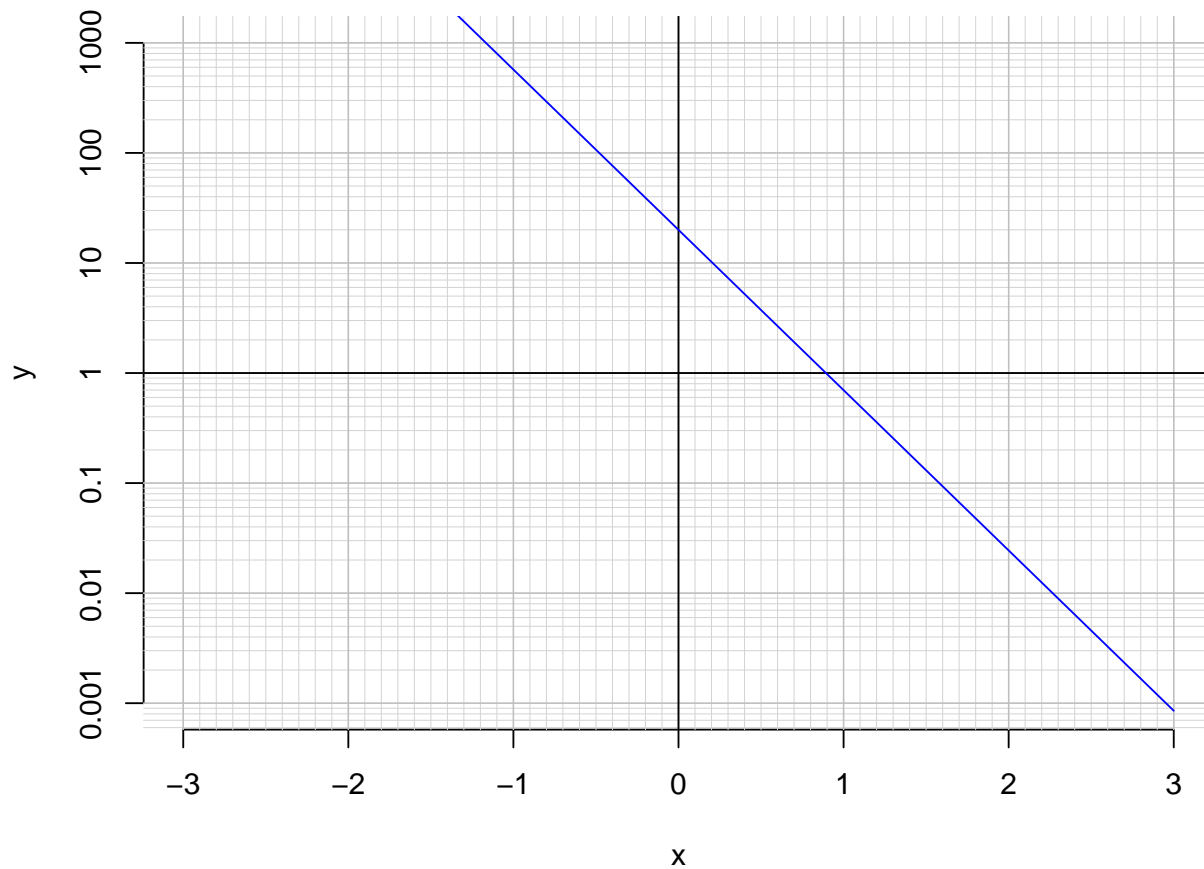
1. Graph $y = \log_2(x - 6) - 3$ and $y = 2^{x+5} + 4$ on the grids below. Also, draw any asymptotes with dotted lines.

$$y = \log_2(x - 6) - 3$$

$$y = 2^{x+5} + 4$$

2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$23 = \left(\frac{4}{3}\right) \cdot 2^{7t/5}$$

3. An exponential function $f(x) = 20 \cdot e^{-3.35x}$ is graphed below on a semi-log plot.

a. Using the plot above, evaluate $f(1.1)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(800)$.